

Title (en)
METHOD FOR DETERMINING THE MASS OF A MOTOR VEHICLE WHILE TAKING INTO ACCOUNT DIFFERENT DRIVING SITUATIONS

Title (de)
VERFAHREN ZUR ERMITTLUNG DER MASSE EINES KRAFTFAHRZEUGS UNTER BERÜCKSICHTIGUNG UNTERSCHIEDLICHER FAHRSITUATIONEN

Title (fr)
PROCEDE DE DETERMINATION DE LA MASSE D'UN VEHICULE AVEC PRISE EN COMPTE DE DIFFERENTES SITUATIONS DE CONDUITE

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Application
EP 02772115 A 20020802

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• EP 0208616 W 20020802

Abstract (en)
[origin: WO03029764A1] The invention relates to a method for determining the mass of a motor vehicle while taking different driving situations into account. The method involves the evaluation of the respective vehicle acceleration, whereby in addition to the driving force of a vehicle drive unit, the respective resistance forces resulting from rotational forces, from the air resistance, from the rolling resistance and from the slope descending force are taken into account as well as the respective braking force so that a multitude of different driving situations can be evaluated. The individual results are each stored and are suited for being combined to form a collective mass value. This enables different driving situations to be weighted differently. In order to take the slope descending force into account, the respective roadway inclination is preferably determined by using a longitudinal acceleration sensor provided inside the vehicle to determine the acceleration occurring in the horizontal direction and by relating this acceleration to the acceleration occurring in the direction of the roadway. The braking force is preferably determined from the respective brake pressure while taking into account an estimated coefficient of friction between the brake lining and the brake disc or the like and is optionally determined based on a comparison with the path covered during the braking process.

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Citation (search report)
See references of WO 03029764A1

Cited by
DE102014211273A1; DE102009057625A1; DE102008019592A1; DE102017208213A1; DE102008026825A1; DE102008026825B4

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